PRIMARY TYPES OF TERRESTRIAL AND FRESHWATER PROTISTA, ANNELIDA AND ARTHROPODA IN THE AUCKLAND INSTITUTE AND MUSEUM: AN ANNOTATED LIST

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Abstract. Primary types (holotypes, syntypes, lectotypes and neotypes) of 265 species of terrestrial and freshwater Protista, Annelida and Arthropoda curated by the Entomology Department of the Auckland Institute and Museum, New Zealand, are listed. Collection information, derived from a combination of specimen labels and published data, and a full bibliographic reference are given for each.

The Entomology Department of the Auckland Institute and Museum is responsible for collections of terrestrial and freshwater aquatic invertebrates (other than Mollusca). The collection currently holds about 345 000 specimens (mostly insects), pinned, in alcohol and on microscope slides. Among them are primary types of 265 species. Lists of primary types held in the collection were published by Powell (1941, 1949) but since that time many more have been added and some missing ones found while others listed by him cannot be located at present.

A grant from the New Zealand Lottery Grants Board enabled us to isolate primary types from the main collection and prepare a 35 mm colour slide photographic catalogue of these specimens and their labels. The purpose of the photographic catalogue is to document the physical condition, configuration, method of mounting, number of labels and handwriting, all important features of primary types that cannot easily or adequately be recorded in a list such as this paper. The photographic catalogue itself will not be published but copies of individual slides are available for study. It will be updated as new primary types are accessioned. We take this opportunity to publish a current list of primary types in the Auckland Institute and Museum, a responsibility urged on all institutions holding such specimens by the International Commission on Zoological Nomenclature (1985, Recommendation 72G).

Type terminology can be confusing, and people have differed in their interpretation of what constitutes a primary type. We follow the definitions of the ICZN (1985) which admit only holotypes, syntypes, lectotypes and neotypes. Syntypes from which a lectotype has subsequently been selected are paralectotypes, but we include them here for the single case that this situation arises since they are still the original equally-ranked members of the author's syntype series. The term 'cotype' was used by many early authors but in the two very different senses of syntype and paratype as currently understood. Only the former are included in this list under the heading 'syntype' regardless of the name 'cotype' appearing on the author's labels. Allotypes are excluded since they merely represent a designated paratype of the opposite sex to the holotype.

MISSING TYPES

The types of Coleoptera from the Kermadec Is described by Broun (1910a) are published as being in the Auckland Museum (AMNZ). While most have been located, Powell (1941) noted that two were missing (*Coxelus xanthonyx*, *Rhyncogonus planidorsis*); in addition, though not listed by him, the type of *Microtribus sculpturatus* from the same publication cannot be found. The types, including the type of *Coxelus punctatus*, have since been located in the Natural History Museum, London (BMNH). There is no evidence that they were ever sent there on loan. Rather, it seems that they were never deposited in the AMNZ as they should have been but remained in Broun's collection, eventually going with it to London as part of Broun's bequest. Under an agreement between the two museums in 1969, the types of *C. punctatus* and *R. planidorsis* were transferred from the BMNH to the AMNZ in exchange for AMNZ's specimen of *C. punctatus* which had hitherto been presumed to be the type; the BMNH retained the type of *C. xanthonyx*. One of the two syntypes of *Microtribus sculpturatus* Broun was also located in the BMNH where it remains; the other has not been found.

As part of this curatorial exercise, several missing or previously unrecognised primary types of New Zealand Lepidoptera were 'discovered' in the Clarke collection. They are: Carposina sanctimonea Clarke, Leucania hartii Howes, Melanchra dives Philpott, Morrisonia longstaffii Howes and Morrisonia pascoei Howes. Types that cannot be located are: Mimopeus parvus Watt, Epithectis transversella Hudson, and Mallobathra memotuina Clarke.

SOURCES OF PRIMARY TYPE SPECIMENS

The origin of the type specimens and their distribution among the major groups of invertebrates tells something of the history of the Auckland Museum's collections in entomology and also partly reflects the interests of former staff and associates. Three significant sources of type material can be recognised.

1. The C.E. Clarke Collection:

Clarke was an amateur entomologist who collected extensively in Otago, Southland, parts of Fiordland and around Auckland, and also in the Pacific islands and Australia. He donated part of his collection to the Auckland Museum shortly after the present building was opened in 1929. After his death, the Museum jointly purchased and divided the remainder with the BMNH. Clarke's collection accounts for almost half of the present holdings of primary types: 86 Lepidoptera species described by him, Hudson, Howes and Philpott, and an additional 21 species from various insect orders subsequently described by other entomologists.

2. Expeditions to offshore islands:

The 1940s to 1960s saw many large-scale expeditions to various offshore islands, particularly the Three Kings in 1946 (E.G. Turbott) and 1952-53 (J.S. Edwards), and the subantarctic islands (E.G. Turbott). Turbott did not describe any new species of invertebrates himself, but 43 species have been described by others from his material in the Auckland Museum collection.

3. Collecting and research activities of K.A.J. Wise:

K.A.J. Wise was the Museum's first Curator of Entomology. His systematic programme of invertebrate extraction from soil and leaf litter procured specimens of many Araneae and Pseudoscorpionida that became holotypes. Specialist collecting in the intertidal zone of rocky shores produced new species of Acari and Coleoptera, and in addition he described several new species of Trichoptera from the C.E. Clarke Collection. His efforts have resulted in 38 primary types.

ARRANGEMENT OF THE LIST

In the following list, taxonomic groupings of phyla and classes are presented phylogenetically but beyond that subdivisions are alphabetical. Since a species is recognised by its binomen and not just the specific epithet, species are listed alphabetically by the genus in which they were originally placed. No attempt has been made to provide current nomenclature for each species, nor are families given because many of the species have been placed in several families at different times depending on current opinion on higher classification. Entries are arranged much in the format adopted by Palma, Lovis & Tither (1989) as follows:

Species binomen Author, date: page number on which description commences.

TYPE category, sex if known, means of preservation.

Label data in the format: Locality (from general to specific), date of collection, collector's name. Habitat data.

Note: Explanatory note if required.

Entries prefixed by an asterisk (*) denote specimens which are recorded as belonging to the Auckland Institute and Museum but which cannot be located at present or are held elsewhere.

Locality and habitat data are taken from a combination of labels and published information and are edited into a more-or-less consistent format. Discrepancies between the two sources are common but it is usually clear as to which is the more reliable. It is not the purpose of this paper to resolve all these problems where they arise; rather, subsequent specialists and revisers should judge for themselves. We have not attempted to give data exactly as on labels since that sort of information is available from the photographic catalogue.

Abbreviations for geographical and locality information follow Walker & Crosby (1988). Acronyms for insect collections are as follows:

AMNZ Auckland Institute and Museum.

NMNZ Museum of New Zealand (formerly National Museum of New Zealand), Wellington.

BMNH The Natural History Museum, London (formerly the British Museum (Natural History)).

NZAC New Zealand Arthropod Collection, Mt Albert Research Centre, Auckland.

Phylum SARCOMASTIGOPHORA

Spirotrichosoma magna Helson, 1935: 251

HOLOTYPE, slide

South Island, Kaituna, 1933. From Stolotermes ruficeps.

Phylum ANNELIDA Class OLIGOCHAETA

Megascolex animae Lee, 1959: 281

HOLOTYPE, wet

Northland, Unuwhao, near Spirits Bay, Feb 1946, A.W.B. Powell.

Note: Dissected spermatheca in enclosed smaller vial.

Megascolides tasmani Lee, 1959: 313

HOLOTYPE, wet

Three Kings Is, Great I, Tasman Stm, 31 Dec 1952, J.S. Edwards. Wet greywacke gravel.

Note: Dissected spermatheca in enclosed smaller vial.

Notoscolex equestris Benham, 1942: 220

SYNTYPES (2), wet

Poor Knights Is, Tawhiti Rahi I, 26 Nov 1940, G.A. Buddle, R.A. Wilson, E.G. Turbott, Auckland Museum 138/41.

Note: There are two specimens in the jar. No holotype was designated but the "larger of the two" could be construed as the holotype by implication from the text.

Rhododrilus insularis Lee, 1959: 159

HOLOTYPE, wet

Three Kings Is, South West I, Jan 1952, M.E. Johnston, 788. Ex leaf mould.

Note: Spermatheca in enclosed smaller vial.

Rhododrilus ravus Lee, 1959: 171

HOLOTYPE, wet

Three Kings Is, Great I, Crater Head, 7 Jan 1953, J.S. Edwards. *Melicytus* litter grove.

Note: Spermatheca in enclosed smaller vial.

Rhododrilus tetratheca Lee, 1959: 179

HOLOTYPE, wet

Three Kings Is, Great I, Saddle above Castaway Valley, 7 Jan 1953, J.S. Edwards. Subsoil.

Note: Spermatheca and penial chaeta in smaller enclosed vial.

Phylum **ARTHROPODA**Class **CHILOPODA**

Ballophilus hounselli Archey, 1936: 45

HOLOTYPE, wet & slide G20.1

S of Waikato Heads, Waikawau, 24 Apr 1932, G. Archey.

Note: No type specimen mentioned in publication, nor is locality of type included in published localities but specimen is labelled TYPE in Archey's handwriting. Slide, in poor condition, appears to contain 3 parts: head capsule and antennae, maxillae and palps, and poison claw. Body of type pale and soft.

Class ARACHNIDA Order ACARI

Dendrolaelaps (Pontiolaelaps) crenatus Luxton, 1984: 84

HOLOTYPE ♀. slide

N Auckland, Leigh, Omaha Cove, 5 Dec 1968, K.A.J. Wise. Intertidal zone, sheltered rock platform.

Dendrolaelaps (Pontiolaelaps) terebratus Luxton, 1984: 92

HOLOTYPE ♀, slide

N Auckland, Leigh, exposed rock platform opposite Goat I, 5 Dec 1968, K.A.J. Wise. From *Elminius* sp on rock.

Geckobia haplodactyli Womersley, 1941: 325

HOLOTYPE ♀, slide

Auckland, 1941. On Hoplodactylus duvaucellii.

Note: The specific epithet and host genus are consistently misspelled *haplodactyli* and *Haplodactylus* in the publication. Although correctly spelled *haplodactyli* and *Haplodactylus* on the specimen label, the name as published must stand since there is no clear internal evidence within Womersley's paper of inadvertent error (ICZN, 1985, Article 32c).

Geckobia nautilina Womersley, 1941: 328

HOLOTYPE ♀, slide

N.Z.

Leioseius australis Luxton, 1984: 96

HOLOTYPE ♀, slide

N Auckland, Leigh, exposed rock platform opposite Goat I, 5 Dec 1968, K.A.J. Wise. From barnacles (*Elminius*) on rock.

Pontiolaelaps salinus Luxton, 1989: 413

HOLOTYPE ♀, slide

Otago, Portobello, Marine Biology Laboratory, Feb 1968, M. Luxton. From Bostrychia.

Order ARANEAE

Aparua hapua Forster, 1968: 135

HOLOTYPE ♀, wet

Little Barrier I, Summit Track, 22 Nov 1947, E.G. Turbott. In possession of a black wasp.

Aparua houhora Forster, 1968: 135

HOLOTYPE ♀, wet North I. Houhora

Aparua regia Forster, 1968: 136

HOLOTYPE ♀, wet

Three Kings Is, Great I, camp and depot area, 18 Mar-14 May 1946, E.G. Turbott.

Aparua taranga Forster, 1968: 131

HOLOTYPE ♀, wet

Hen I, 21 May 1949, E.G. Turbott. In tube nest.

Armigera turbotti Marples, 1956: 336

SYNTYPE o, wet

Three Kings Is, Great I. Under stones Quadrat 1.

Note: Marples did not designate a holotype so the 2 of mentioned are regarded as syntypes. This specimen appears to be the one on which the description was based. The other specimen, which was "prepared by boiling in potash" cannot be located.

Cambridgea turbotti Forster & Wilton, 1973: 150

HOLOTYPE ♀, wet

Three Kings Is, Great I, 14 May 1946, E.G. Turbott. Under stone, bare ground under *Limra* in Quadrat 1.

Note: Epigynum and internal genitalia in enclosed microvial.

Chiracanthium insulare Marples, 1956: 332

HOLOTYPE ♂, wet

Three Kings Is, Great I.

Note: Specimen has been relabelled since Forster & Blest (1979) erected and transferred the species to the genus *Kaitawa*. No original labels remain.

Drapetisca australis Forster, 1955: 193

HOLOTYPE ♀, wet

Antipodes Is, top of slopes above Ringdove Bay, 10 Nov 1950, E.G. Turbott. Ex mould under *Poa literosa* with *Polystichum vestitum*.

Gasparia coriacea Forster, 1970: 98

HOLOTYPE of, wet

White I, Ohaura, 6 Dec 1966, K.A.J. Wise. Auckland Museum plant/soil sample 121, *Histiopteris* leaf litter.

Note: Abdomen in enclosed microvial.

Gasparia mangamuka Forster, 1970: 87

HOLOTYPE ♀, wet

Hokianga, Mangamuka Gorge, 19 Nov 1966, K.A.J. Wise. Auckland Museum plant/soil sample 104, ex leaf mould.

Gasparia nebulosa Marples, 1956: 85

HOLOTYPE ♀, wet

Thee Kings Is, Great I, Quadrat 1.

Hapona paihia Forster, 1970: 117

HOLOTYPE [♀], wet

Bay of Islands, 3 miles S of Paihia, 8 Dec 1966, K.A.J. Wise. Auckland Museum plant/soil sample 172, ex leaf litter by swamp.

Note: Date on label and as published (8 Dec) disagree with Auckland Museum plant/soil sample register (18 Dec).

Hexathele pukea Forster, 1968: 148

HOLOTYPE ♀, wet

King Country, Pukemako, 1962, Howard Hill Collection.

Huka alba Forster & Wilton, 1973: 83

HOLOTYPE ♀, wet

East side of Ruapehu, Waihohonu Stm, 945 m, 17 Jan 1967, K.A.J. Wise. Auckland Museum plant/soil sample 191, moss on ground in beech forest.

Note: Allotype ♂ in same tube.

Lithyphantes regius Marples, 1956: 337

HOLOTYPE ♀, wet

Three Kings Is, Great I, 12 May 1946, E.G. Turbott.

Note: Identified as *Steatoda lepida* (O.P. Camb.) by S.B. Hann, 25 Nov 1991. Formal synonymy not published.

Migas borealis Wilton, 1968: 82

HOLOTYPE ♀, wet

Three Kings Is, Great I, 5 Jan 1953, J.S. Edwards.

Note: Right legs and pedipalps in enclosed microvial.

Migas insularis Wilton, 1968: 96

HOLOTYPE ♀, wet

Little Barrier I, Summit Tom Thumb Track, 7 Oct 1945, E.G. Turbott.

Note: Right legs and pedipalp in enclosed microvial.

Muritaia longispinata Forster & Wilton, 1973: 267

HOLOTYPE [♀], wet

Whakatane Co, Forest E of L Rotoma, 5 Oct 1966, K.A.J. Wise. Auckland Museum plant/soil sample 66, leaf litter.

Note: The vial of types contains $2^{\circ\circ}$. The holotype is the undissected specimen (R.R. Forster, *in litt*, 21.vii.1993).

Novalaetesia anceps Millidge, 1988: 42

HOLOTYPE ♀, wet

Mangonui Co, North Cape area, Unuwhao, 610 m, 22 Feb 1967, K.A.J. Wise. Auckland Museum plant/soil sample 217, forest remnant, leaf litter in pits on ridge.

Note: ♀ internal genitalia in enclosed microvial.

Oramiella wisei Forster & Wilton, 1973: 84

HOLOTYPE of, wet

Northland, N of Maungaturoto, 9 Jul 1967, K.A.J. Wise. Auckland Museum plant/soil sample 294, ex moss on tree.

Note: Right pedipalp in enclosed microvial.

Paramamoea aquilonalis Forster & Wilton, 1973: 219

HOLOTYPE ♀, wet

North I, Bay of Islands Co, forest 3 miles S of Paihia, 18 Dec 1966, K.A.J. Wise. Auckland Museum plant/soil sample 172, leaf litter by swamp.

Note: Right legs and pedipalp, epigynum and genitalia in 2 enclosed microvials.

Paramamoea pandora Forster & Wilton, 1973: 221

HOLOTYPE ♀. wet

Mangonui Co, North Cape area, 3 miles SE of Unuwhao, 183 m, 24 Feb 1967, K.A.J. Wise. Auckland Museum plant/soil sample 236, leaf litter.

Note: The vial of types contains several specimens. The holotype is the undissected $^{\circ}$ (R.R. Forster, *in litt*, 21.vii.1993) in the microvial also containing a dissected $^{\circ}$ and a subadult $^{\circ}$ and $^{\circ}$. The allotype is in a separate enclosed microvial.

Paramamoea parva Forster & Wilton, 1973: 220

HOLOTYPE [♀], wet

Waipoua, Jan 1952, W.R McGregor. Ex leaf mould.

Note: This specimen has been relabelled and originals are absent. There is internal inconsistency between labels and published information seems to be more accurate. Two other labels read: "*Paramamoea waipoua* For, Hol $^{\circ}$, Waipotia [sic]..." and "*Paramamoea parva* F,W., Allotype $^{\circ}$ ", casting doubt as to which species this is and its type status. The specimen is $^{\circ}$ so cannot be the holotype of *P. waipoua* which is $^{\circ}$ and is in the Otago Museum (see Forster & Wilton 1973:221-222). Also note that specimen is a holotype $^{\circ}$, not an allotype $^{\circ}$.

Subantarctia turbotti Forster, 1955: 170

HOLOTYPE [♀], wet

Auckland Is, Carnley Hbr, E shore N Arm, 28 Oct 1944, E.G. Turbott. Under sticks.

Theridion longicrure Marples, 1956: 339

HOLOTYPE o, wet

Three Kings Is, Great I.

Order OPILIONES

Achihasta salebrosa Forster, 1948: 315

HOLOTYPE, wet

Three Kings Is, Great I, 29 Apr 1946, E.G. Turbott. Under stone.

Triregia monstrosa Forster, 1948: 317

HOLOTYPE, wet

Three Kings Is, Great I, ridge above depot, 6 May 1946, E.G. Turbott. Under stones.

Order PSEUDOSCORPIONIDA

Apatochernes cruciatus Beier, 1976: 230

HOLOTYPE o, wet

E coast Coromandel, Green I, West end, 26 Apr 1967, J.A.F. Jenkins. Auckland Museum plant/soil sample 275, leaf litter and soil.

Note: Allotype in same tube.

Apatochernes solitarius Beier, 1976: 231

HOLOTYPE ♀, wet

Coromandel Pen, E coast, S side Te Anaputa Pt, 10 Dec 1966, K.A.J. Wise. Auckland Museum plant/soil sample 150, nikau leaf litter.

Apatochernes turbotti Beier, 1969: 417

HOLOTYPE of, wet

Three Kings Is, South West I, 13 Jan 1951, E.G. Turbott. Auckland Museum plant/soil sample 2, under small groves of low karaka and puka in scrub half-way down NE slope.

Apatochernes wisei Beier, 1976: 233

HOLOTYPE ♂, wet

Mangamuka Hills, Forest summit, 382 m, 19 Nov 1966, K.A.J. Wise. Auckland Museum plant/soil sample 90, debris beaten from *Freycinetia*.

Note: Allotype in same tube.

Nesidiochernes scutulatus Beier, 1969: 415

HOLOTYPE ♀, wet

Hamilton, R. Nielson.

Phaulochernes jenkinsi Beier, 1976: 221

HOLOTYPE of, wet

E coast Coromandel, W side Shoe I, 21 Apr 1967, J.A.F. Jenkins. Auckland Museum plant/soil sample 273, leaf litter pohutukawa forest.

Note: Beier (1976) designated a ♂ holotype, ♀ allotype and 14 paratypes (5♂, 4♀, 5 nymphs). His vial of types (labelled "*Phaulochernes jenkinsi* det Beier, Typen") contains 9♂, 6♀ and 7 nymphs. It is impossible to determine which is the holotype.

Smeringochernes zealandicus Beier, 1976: 224

HOLOTYPE ♂, wet/dry

Tauranga Bay, Butterfly V, 28 Nov 1966, K.A.J. Wise. Auckland Museum plant/soil sample 46, rotting wood/soil.

Note: Tube contains 3 adults and 4 nymphs. It is not clear which specimen is the holotype. Types have dehydrated and been transferred to a gelatin capsule inside original vial.

Order COLEOPTERA

Acalles metrosiderae Broun, 1910a: 296

SYNTYPE, dry

Kermadec Is, Sunday I, W.L. Wallace.

Anacaena tepida Winterbourn, 1970: 27

HOLOTYPE ♂, wet

Taupo, Waipahihi Stm, 7 Aug 1966, M.J. Winterbourn.

Aphodius raoulensis Broun, 1910a: 295

HOLOTYPE, dry

Kermadec Is, Sunday I, W.L. Wallace. Under rotten logs.

Bountya insularis Townsend, 1971: 183

HOLOTYPE ♂, dry

Bounty Is, 11 Nov 1950, E.G. Turbott. Under stones.

Corticaria longula Broun, 1910a: 293; 1910b: 26

?SYNTYPE, dry

Kermadec Is, Sunday I, W.L. Wallace.

Note: Type status doubtful; specimen does not bear a "Broun Number" (see May, 1967).

Coxelus punctatus Broun, 1910a: 294

HOLOTYPE, dry

Kermadec Is, Sunday I, W.L. Wallace.

Note: Located in BMNH and transferred to AMNZ in 1969. The specimen formerly considered to be the holotype listed by Powell (1941) has no type status (R.D. Pope, *in litt.*, 1969) and was transferred to BMNH in exchange. The species is probably a synonym of *C. xanthonyx* Broun (det. R.D. Pope).

*Coxelus xanthonyx Broun, 1910a: 294

HOLOTYPE, dry

Kermadec Is, Raoul I, W.L. Wallace. In decayed Metrosideros in crater.

Note: Recorded missing by Powell (1941) but located in and retained by BMNH by agreement in 1969.

Duvaliomimus watti Britton, 1958: 188

HOLOTYPE ♂, dry

Auckland District, Moumoukai V, 24 Apr 1954, J.C. Watt.

Eutornopsis piceus Broun, 1910a: 300

SYNTYPE o, dry

Kermadec Is, Sunday I, W.L. Wallace.

Note: Specimen bears a lectotype label (det G. Kuschel, 1966) but designation not published.

Heterodoxa secreta Cameron, 1950: 25

SYNTYPES (2), dry

Off N coast NZ, Three Kings Is, Great King I, 6 Oct 1948, E.G. Turbott. Taken from leaf mould.

Note: Both specimens glued to same card rectangle. The description does not specify which is the type.

Hyphalus wisei Britton, 1973: 121

HOLOTYPE, dry

Rodney Co, N of Leigh, exposed rock platform opposite Goat I, 5 Dec 1968, K.A.J. Wise. Intertidal zone.

Laccobius mineralis Winterbourn 1970: 25

HOLOTYPE &, wet

Taupo, Waipuwerawera Stm, Jun 1966, M.J. Winterbourn.

Lissotes triregius Holloway, 1963: 77

HOLOTYPE ♂, dry

Three Kings Is, Great I, Hapuka Pt, NE slopes above sea, 8 May 1946, E.G. Turbott. *Note*: Dissected genitalia in microvial on pin.

Menimus clarkei Kaszab, 1985: 45

HOLOTYPE, dry

Fiji, C.E. Clarke.

Note: Type repository mistakenly published as "D.S.I.R." (now NZAC).

Menimus crosbyi Watt, 1993: 47

HOLOTYPE, dry

Waipoua SF, Waimatenui, C.E. Clarke.

Note: Originally described as *M. clarkei* (Watt, 1992: 27), a junior homonym of *M. clarkei* Kaszab (see above).

*Microtribus sculpturatus Broun, 1910a: 300

SYNTYPE, dry

Kermadec Is, Sunday I, W.L. Wallace. Leaves of Solanum.

Note: One syntype located in BMNH, the other missing.

Mimopeus clarkei, Watt, 1988: 136

 $HOLOTYPE\, \vec{\circ},\, dry$

Molesworth, Awatere R, 25 Dec 1943, C.E. Clarke.

Note: Dissected genitalia (once glued to card on pin) missing.

Mimopeus insularis Watt, 1988: 125

HOLOTYPE ♂, dry

Poor Knights Is, Tawhiti Rahi, Nov 1945, Auckland Museum.

Note: This is *Cilibe tawhitirahi* of Watt (1961, unpubl.). Description refers to ♀ holotype but specimen definitely ♂. Dissected genitalia glued to card on pin.

Mimopeus neglectus Watt, 1988: 120

HOLOTYPE ♂, dry

Wellington, Sinclair Head, 25 Apr 1942, C.E. Clarke.

Note: This is Cilibe elongata neglecta of Watt (1961, unpubl.). Dissected genitalia glued to card on pin.

*Mimopeus parvus Watt, 1988: 128

HOLOTYPE ♂, dry

Molesworth, Awatere R, 25 Dec 1943, C.E. Clarke. Under stone.

Note: No specimens of this species, including 3 paratypes recorded by Watt (1988), can be located in AMNZ.

Mimopeus turbotti Watt, 1988: 124

HOLOTYPE ♂, dry

Three Kings Is, Great I, 3 May 1946, E.G. Turbott. East division under stone near Quadrats 1 and 2

Note: Dissected genitalia glued to card on pin.

Odontria carinata Given, 1954: 269

HOLOTYPE ೆ, dry

Three Kings Is, Great I, 5 May 1946, E.G. Turbott. Depot at night.

Note: Dissected genitalia glued to card on pin.

Peniticus wallacei Broun 1910a: 301

SYNTYPE o, dry

Kermadec Is, Sunday I, W.L. Wallace. Under dead nikau leaves.

Pentarthrum gracilicorne Broun, 1910a: 298

SYNTYPE, dry

Kermadec Is, Sunday I, W.L. Wallace. Rotten ngaio wood.

Phaeophanus turbotti Spiller, 1942: 265

HOLOTYPE ♀, dry

Poor Knights Is, Aorangi I, 23-29 Nov 1940, E.G. Turbott.

Note: Dissected genitalia in microvial on pin.

Platypus posticus Broun, 1910a: 301

HOLOTYPE, dry

Kermadec Is, Sunday I, W.L. Wallace.

Pseudopisalia turbotti Cameron, 1950: 24

SYNTYPES (3), dry

Three Kings Is, Great I, 6 Oct 1948, E.G. Turbott. Taken from leaf mould.

Note: Three specimens are glued to the same piece of card. The description does not specify a holotype.

Psylliodes solanae Broun, 1910a: 302

SYNTYPES (1d 19), dry

Kermadec Is, Sunday I, W.L. Wallace. On the common Solanum.

Note: Two specimens and dissected ♂ genitalia are glued to the same piece of card.

Ptilopodius aitutakii Beaver & Maddison, 1990: 1367

HOLOTYPE ♀, dry & *slide

Cook Islands, Aitutaki, Angari Islet, 3 Sep 1969, K.A.J. Wise.

Note: Left antenna mounted on slide but not located.

Quedius subapterus Cameron 1950: 23

HOLOTYPE, dry

Three Kings Is, Great I, 6 Oct 1948. E.G. Turbott. Taken from leaf-mould.

Rhyncogonus planidorsis Broun, 1910a: 296

HOLOTYPE, dry

Kermadec Is, Sunday I, W.L. Wallace.

Note: Recorded missing by Powell (1941) but located in BMNH and transferred to AMNZ in 1969. Dissected genitalia in microvial on pin.

Salpingus lepidulus Broun, 1910a: 295

SYNTYPE, dry

Kermadec Is, Sunday I, W.L. Wallace.

Scopaeus (Polyodontus) apterus Cameron, 1950: 23

HOLOTYPE, dry

Three Kings Is, Great I, 6 Oct 1948, E.G. Turbott. Leaf-mould.

Sericospilus watti Given, 1960: 375

HOLOTYPE ♂, dry

Great Barrier I, Mt Hobson, 20 Nov 1954, J.C. Watt. Flying in evening.

Note: Dissected genitalia glued to card on pin.

Order COLLEMBOLA

Dicyrtomina turbotti Salmon, 1948a: 299

HOLOTYPE, slide

Three Kings Is, 4 Jun 1946, E.G. Turbott. In leaf mould under large leaf trees.

Entomobrya cuniculicola Pritchard, 1932: 135

HOLOTYPE, wet

Auckland, Manukau, Niger Bay, 6 Aug 1932, E.D. Pritchard.

Folsomides neozealandica Salmon, 1948a: 292

HOLOTYPE, slide

Three Kings Is, 4 Jun 1946, E.G. Turbott. In leaf mould under large trees.

Gnathalonche sensilla Salmon, 1948a: 291

HOLOTYPE, slide

Three Kings Is, 4 Jun 1946, E.G. Turbott. In leaf mould under large leaf trees.

Metakatianna nigraoculata Salmon, 1948a: 298

HOLOTYPE, slide

Three Kings Is, 4 Jun 1946, E.G. Turbott. In leaf mould under large trees.

Pseudosinella dispadentata Salmon, 1948a: 297

HOLOTYPE, slide

Three Kings Is, 4 Jun 1946, E.G. Turbott. In leaf mould under large trees.

Sorensia anomala Salmon, 1948a: 293

HOLOTYPE, slide

Three Kings Is, 4 Jun 1946, E.G. Turbott. In leaf mould under large trees.

Zealandanura bituberculata Deharveng & Wise, 1987: 144

HOLOTYPE, slide

Campbell I, Tucker Cove, 28 Feb 1963, K.A.J. Wise. Under timber.

Order DERMAPTERA

Brachylabis manawatawhi Giles, 1958: 44

HOLOTYPE ♂, dry & wet

Three Kings Is, South West I, 13 Jan 1951, E.G. Turbott. In forest near summit under stones and leaf-mould.

Note: Dissected genitalia and manubrium in alcohol, not on slide as indicated by Giles' handwritten label.

Order DIPTERA

Anabarhynchus wisei Lyneborg, 1992: 66

HOLOTYPE ♀, dry

Routeburn, 25 Dec 1914.

Note: Dissected genitalia in microvial on pin.

Australimyza anisotomae Harrison, 1953: 277

HOLOTYPE ♂, dry

Antipodes Is, tussock slopes above Ringdove Bay, 7 Nov 1950, E.G. Turbott.

Calliphora (Paracalliphora) kermadeca Kurahashi, 1971: 173

Kermadec Is, Raoul I, Low Flat 30 m, 23 Sep-8 Oct 1962, G.A. Samuelson. Net trap, dead goat.

Calliphora (Paracalliphora) rufipes kermadecensis Kurahashi, 1971: 191

HOLOTYPE ♂, dry

Kermadec Is, Raoul I, Mt Moumoukai, 530 m, 4 Sep 1962, G.A. Samuelson.

Erioptera (Trimicra) antipodarum Alexander, 1953: 757

HOLOTYPE ೆ, dry

Antipodes Is, tussock slopes above Ringdove Bay, 9 Nov 1950, E.G. Turbott.

Erioptera (Trimicra) brachyptera Alexander, 1955: 237

HOLOTYPE ♂, dry

Campbell I, 1947, J.H. Sorenson.

Helosciomyza simillima Harrison, 1959: 45

HOLOTYPE ♂, dry

Arthurs Pass, 16 Jan 1922, C.E. Clarke.

Macrocanace antipoda Harrison, 1953: 276

HOLOTYPE ♀, dry

Antipodes Is, shore of Ringdove Bay, 5 Nov 1950, E.G. Turbott. Taken in spider web.

Pericoma clarkei Satchell, 1954: 480

HOLOTYPE ♂, dry

Hump Mt, 3 Jan 1922, C.E. Clarke.

Zealandortalis philpotti Harrison, 1959: 178

HOLOTYPE ♂, dry

Auckland, 20 Oct 1929, A. Philpott.

Note: Both holotype \triangleleft and paratype \triangleleft on same pin.

Order HEMIPTERA

Arahura dentata Knight, 1975: 189

HOLOTYPE ♂, dry

Cuvier I, Summit, 12 Jan 1972, K.A.J. Wise. On weeds and grasses.

Note: Dissected genitalia in microvial on pin.

Atylana rarotongae Eyles & Linnavuori, 1974: 41

HOLOTYPE ೆ, dry

Cook Is, Rarotonga, 2 Jan 1938, C.E.Clarke.

Note: Dissected genitalia and abdomen glued to card on pin.

Calotettix lais Eyles & Linnavuori, 1974: 40

HOLOTYPE ♂, dry

Cook Is, Rarotonga, 15 Dec 1937, C.E. Clarke.

Note: Dissected genitalia glued to card on separate pin.

Campylomma aitutaki Schuh 1984: 260

HOLOTYPE ♂, dry

Cook Is, Aitutaki, Vaipeka, 28 Aug 1969, K.A.J. Wise. Swept.

Campylomma cookensis Schuh, 1984: 272

HOLOTYPE ♂, dry

Cook Is, Aitutaki, Maina Islet, 3 Sep 1969, K.A.J. Wise.

Carystoterpa ikana Hamilton & Morales, 1992: 14

HOLOTYPE ♂, dry

Mangamuka hills, Forest summit, 19 Dec 1966, K.A.J. Wise.

Note: Dissected genitalia in microvial on pin.

Carystoterpa minima Hamilton & Morales, 1992: 15

HOLOTYPE ♀, dry

North Cape area, Kerr Pt, cliff tops, 6 Dec 1967, K.A.J. Wise. Swept.

Cermatulus turbotti Woodward, 1950b: 24

HOLOTYPE [♀], dry

Three Kings Is, Great I, Tasman V, 6 May 1946, E.G. Turbott. On tea-tree.

Chinamiris muehlenbeckiae Woodward, 1950a: 10

HOLOTYPE ♂, dry

North Island, Manawatu, Foxton, 8 Jan 1950, T.E. Woodward. On Muehlenbeckia australis.

Cicada aprilina Hudson, 1891: 53

SYNTYPES (200), dry

Wellington, Botanical Gardens, 7 Apr 1889, G.V. Hudson.

Note: Lectotype in NMNZ designated by Fleming & Ordish (1966) hence these specimens now paralectotypes.

Cicada iolanthe Hudson, 1891: 53

SYNTYPE ♀, dry

Wellington, Karori, Dec 1890, G.V. Hudson.

Cicada muta var. minor Hudson, 1891: 52

LECTOTYPE o, dry

Wellington, Cape Terewhiti, 15 Dec 1889, G.V. Hudson.

Note: Lectotype designation by Fleming & Ordish (1966).

Cicada tristis Hudson, 1891: 52

SYNTYPE ♀, dry

Wellington, Botanical Gardens, Feb 1889, G.V. Hudson.

Clavaptera ornata Kirman, 1985: 126

HOLOTYPE ♂, dry

North Cape area, 4 miles from Spirits Bay Rd, Serpentine Access Rd, 30 Apr 1968, J. Bertrand. Auckland Museum plant/soil sample 526, leaf litter.

Ctenoneurus pendergrasti Kormilev, 1971: 58

HOLOTYPE ♀, dry

Tarawera, 14 Oct 1935, O.M. Swezey.

Ctenoneurus setosus Lee & Pendergrast, 1977: 168

HOLOTYPE ♂, dry

Kawakawa, Waiomio Caves area, 24 Sep 1956, R.A. Crowson. On fruit bodies of fungus *Daldinia* sp.

Cymus novaezelandiae Woodward, 1954: 224

HOLOTYPE ♂, dry

Manawatu, Paiaka, 9 Jan 1950, T.E. Woodward.

Cyrtorhinus cumberi Woodward, 1950a: 16

HOLOTYPE ♂, dry

Manawatu, Paiaka, 4 Jan 1950, T.E. Woodward. Tufts of rushes and grasses.

Deraeocoris maoricus Woodward, 1950a: 12

HOLOTYPE ♂, drv

Nelson, Botanical Reserve, 11 Dec 1949, T.E. Woodward.

Euacanthella brunnea Evans, 1966: 143

HOLOTYPE ♀, dry

Auckland, Portland Rd, 20 Mar 1956, K.D. Hill.

Isodermus maculosus Pendergrast, 1965: 237

HOLOTYPE ♂, dry

Waitati, 25 Oct 1925, C.E. Clarke.

Modicarventus wisei Kirman, 1989: 27

HOLOTYPE ♀, dry

North Cape area, Unuwhao, 610 m, 22 Feb 1967, K.A.J. Wise. Auckland Museum plant/soil sample 218, forest remnant.

Oiophysa fuscata pendergrasti Woodward, 1956: 49

HOLOTYPE ♂, dry

Coromandel Pen, ridge to Little Moehau, 24 Oct 1954, J.G. Pendergrast. Ex moss, Weinmannia forest.

Note: Dissected genitalia, abdomen and wing enclosed between two coverslips on pin.

Rhopalimorpha (Lentimorpha) alpina Woodward, 1953a: 304

HOLOTYPE ♀, dry

Southland, McKinnon Pass, 28 Dec 1919, C.E. Clarke.

Note: Dissected genitalia in microvial on pin.

Rhopalimorpha lineolaris Pendergrast, 1950: 32

HOLOTYPE ♀, dry

Auckland, Orakei, 8 Jul 1950. On Carex longifolia.

Sthenarus myersi Woodward, 1950a: 22

HOLOTYPE ♂, dry

Manawatu, Foxton, 8 Jan 1950, T.E. Woodward. On Muehlenbeckia australis.

Note: Dissected genitalia in microvial on pin.

Tomocoris insularis Woodward, 1953b: 213

HOLOTYPE ♀, dry

Three Kings Is, Great I, Castaway V, 15 Jan 1951, T.E. Woodward. In leaf-mould under sedges beside Castaway Stm.

Note: Dissected genitalia in microvial on pin.

Trypetocoris aucklandensis Woodward, 1953b: 217

HOLOTYPE ♂, dry

N Auckland, Waipoua Forest, Jan 1952, W.R. McGregor. Leaf-mould.

Note: Dissected genitalia in microvial on pin.

Trypetocoris separatus Woodward, 1953b: 218

HOLOTYPE ♂, dry

N Auckland, Matakana, Tamahanga Hill, 30 Mar 1938, C.E. Clarke.

Ugyops (Paracona) pelorus Fennah 1965: 11

 $HOLOTYPE\ \vec{\circ},\ dry$

Whakatane Co, Ohope beach, 22 Jan 1947, C.R. Pattison.

Order ISOPTERA

Calotermes (Calotermes) curvithorax Kelsey, 1943: 45

SYNTYPES, wet (2 tubes)

Phoenix Group, Canton I, 30 May 1949, G.A. Buddle. From log of wood on beach. *Note:* One tube contains 29 specimens (1 soldier, 28 nymphs) and many eggs, the other 1 alate adult. Published information records wings on 2 slide mounts but not located.

Order LEPIDOPTERA

Adeixis parvitis Howes, 1917: 274

HOLOTYPE ♂, dry

Dunedin, Broad Bay, 18 Dec 1915, C.E. Clarke.

Aletia empyrea Hudson, 1918: 61

LECTOTYPE ♀, dry

Routeburn V, 25 Dec 1914, C.E. Clarke.

Note: Lectotype designation by Dugdale (1988).

Antipodesma turbotti Salmon & Bradley, 1956: 65

HOLOTYPE &, dry & 2 slides (19/53, 19/54)

Antipodes Is, tussock slopes above Ringdove Bay, 6 Nov 1950, E.G. Turbott.

Note: Genitalia and wings mounted on separate microscope slides.

Apatetris nivea Philpott, 1930: 7

HOLOTYPE ♂, dry

Auckland, 12 Jan 1919, C.E. Clarke.

Archyala culta Philpott, 1931: 35

HOLOTYPE ♂, dry

Dunedin, Opoho, 17 Dec 1921, C.E. Clarke.

Archyala tigrina Philpott, 1930: 15

HOLOTYPE ♂, dry

Whangarei, Waikaraka V, 16 Jan 1927, C.E. Clarke.

Astrogenes insignita Philpott, 1930: 16

HOLOTYPE o, dry

Whangarei, Waikaraka V, 17 Jan 1927, C.E. Clarke Collection.

Note: Locality labels do not agree with the published information - see Dugdale (1988: 60).

Batrachedra astricta Philpott, 1930: 14

HOLOTYPE ♂, dry

Dunedin, Opoho, 17 Dec 1921, C.E. Clarke.

Borkhausenia clarkei Philpott, 1928: 366

HOLOTYPE ♂, dry

Auckland, Kauri Gully, 3 Jan 1921, C.E. Clarke.

Borkhausenia lassa Philpott, 1930: 9

HOLOTYPE ♂, dry

Dunedin, Leith, 1 Dec 1915, C.E. Clarke.

Borkhausenia laudata Philpott, 1930: 9

HOLOTYPE ♂, dry

Bluecliff, 4 Jan 1922, C.E. Clarke.

Borkhausenia levicula Philpott, 1930: 8

HOLOTYPE ♂, dry

L Manapouri, Hunter Mts, Flat Mt, 4000', 28 Dec 1928, C.E. Clarke.

Capua variegata Philpott, 1930: 4

HOLOTYPE ♂, dry

Wairakei, 31 Dec 1916, C.E. Clarke.

Note: Dissected abdomen in microvial on pin.

Carposina literata Philpott, 1930: 11

HOLOTYPE ♂, dry

Franz Josef Glacier, Defiance Hut, 2600', 20 Jan 1925, C.E. Clarke.

Carposina marginata Philpott, 1931: 33

HOLOTYPE ♂, dry

Okoroire, 26 Dec 1920, C.E. Clarke.

Carposina sanctimonea Clarke, 1926: 418

HOLOTYPE ♀, dry

Arthurs Pass, c. 3500', 16 Jan 1922, C.E. Clarke.

Note: Found since Powell (1941) recorded it missing.

Choroclystis clarkei Howes, 1917: 274

HOLOTYPE ♀, dry

Dunedin, Flagstaff Hill, 8 Mar 1915, C.E. Clarke.

Crambus corylana Clarke, 1926: 417

HOLOTYPE ♂, dry

Central Otago, Mt Ida, 19 Feb 1922, C.E. Clarke.

Ctenopseustis fraterna Philpott, 1930: 7

HOLOTYPE ♂, dry

Whangarei, 11 Jan 1921, C.E. Clarke.

Note: Dissected abdomen in gelatin capsule on separate pin.

Ctenopseustis obliquana distincta Salmon, 1948c: 311

HOLOTYPE ♂, dry

Three Kings Is, Great I, Tasman V, 23 Apr 1946, E.G. Turbott. On tea tree.

Note: Dissected abdomen in microvial on pin.

Elachista stellata Philpott, 1931: 31

HOLOTYPE ♂, dry

Pembroke, 23 Dec 1923, C.E. Clarke.

Epichorista candida Clarke, 1926: 419

HOLOTYPE ♀, dry

L Manapouri, Hope Arm, 4 Jan 1923, C.E. Clarke Collection.

Note: Abdomen in gelatin capsule on pin.

Epichorista mimica Philpott, 1930: 5

HOLOTYPE ♂, dry

Central Otago, Mt Ida, 19 Feb 1922, C.E. Clarke.

Note: Abdomen in microvial on pin.

Epichorista tenebrosa Philpott, 1917: 243

HOLOTYPE ♂, dry

Ben Lomond, 23 Feb 1916, C.E. Clarke.

Note: Abdomen in microvial on separate pin.

*Epithectis transversella Hudson, 1939: 438

HOLOTYPE ♀, dry

Auckland Domain, 10 Mar 1934, C.E. Clarke.

Gelechia calaspidea Clarke, 1934: 14

HOLOTYPE ♂, dry

L Manapouri, Hunter Mts, Flat Mt, 4000', 28 Dec 1928, C.E. Clarke.

Gelechia contraria Philpott, 1930: 8

HOLOTYPE ♂, dry

Westland, Waiho R, 17 Jan 1925, C.E. Clarke.

Gelechia parvula Philpott, 1930: 7

HOLOTYPE ♂, dry

L Manapouri, Hope Arm, 7 Jan 1923, C.E. Clarke.

Gelophaula aridella Clarke, 1934: 13

HOLOTYPE ♂, dry

L Manapouri, Hunter Mts, Flat Top Mt, 5 Jan 1923, C.E. Clarke.

Glyphipteryx barbata Philpott, 1918: 130

HOLOTYPE ♂, dry

Dunedin, Waitati, 5 Nov 1916, C.E. Clarke.

Glyphipteryx scintilla Clarke, 1926: 420

HOLOTYPE ♂, dry

L Manapouri, Hunter Mts, Flat Mt, 4000', 5 Jan 1923, C.E. Clarke.

Gymnobathra aurata Philpott, 1931: 32

HOLOTYPE ♂, dry

Dunedin, Opoho, 30 Nov 1921, C.E. Clarke.

Gymnobathra nigra Philpott, 1930: 9

HOLOTYPE ♂, dry

W of L Te Anau, Kepler Mts, 4000', 3 Jan 1925, C.E. Clarke.

Gymnobathra zephyrana Clarke, 1926: 419

HOLOTYPE ♂, dry

Whangarei, 11 Jan 1921, C.E. Clarke. In forest.

Heliostibes barbarica Philpott, 1930: 12

HOLOTYPE ♂, dry

Whangarei, 11 Jan 1921, C.E. Clarke.

Heliostibes bilineata Salmon, 1948c: 310

HOLOTYPE, dry

Three Kings Is, Great I, 24 Apr 1946, E.G. Turbott. From flowering kanuka trees.

Hydriomena callichlora harmonica Clarke, 1926: 417

HOLOTYPE ♂, dry

Waitati Bush nr Dunedin, 7 Nov 1917, C.E. Clarke.

Ichneutica cana Howes, 1914: 96

HOLOTYPE ♂, dry

Garvie Mts, 20 Nov 1910, W.G. Howes

Note: Published locality and date (Hector Mts, 20 Nov 1911) disagree with label (Garvie Mts, 20 Nov 1910).

Izatha toreuma Clarke, 1926: 419

HOLOTYPE [♀], dry

Arthurs Pass, 3500', 23 Jan 1922, C.E. Clarke.

Leptocroca aquilonaris Philpott, 1931: 31

HOLOTYPE o, dry

Auckland, Kauri Gully, 26 Jan 1921, C.E. Clarke.

Leptocroca lenita Philpott, 1931: 32

HOLOTYPE ♂, dry

Buller Gorge nr Newtons Flat, 29 Dec 1918, G.V. Hudson.

Leucania hartii Howes, 1914: 95

HOLOTYPE ೆ, dry

Cape Egmont lighthouse, 20 Apr 1911, S. Hart.

Note: Published sex (9) and date (20 Mar 1911) do not agree with specimen and label.

Locheutis fusca Philpott, 1930: 11

HOLOTYPE ♂, dry

Tongariro National Park, 16 Jan 1930, A. Philpott.

Lysiphragma argentaria Salmon, 1948c: 310

HOLOTYPE ♂, dry

Three Kings Is, Great I, 22 Apr 1946, E.G. Turbott. On tea tree after rain.

Mallobathra cataclysma Clarke, 1934: 15

HOLOTYPE [♀], dry

Upper Routeburn R, Harris saddle, 20 Jan 1926, C.E. Clarke. On bark of Nothofagus.

*Mallobathra memotuina Clarke, 1934: 14

Dunedin, Anderson's Bay, Vauxhall cliff, Nov & Dec, 1928 & 1929, C.E. Clarke.

Note: Not located by Dugdale (1988)

Mallobathra nocturna Clarke, 1926: 421

HOLOTYPE ♂, dry

Auckland, Northcote, Kauri Gully, 10 Jan 1919, C.E. Clarke.

Note: Published date (Jan 1921) does not agree with label.

Mecyna antipodea Salmon & Bradley, 1956: 77

HOLOTYPE ♂, dry

Antipodes Is, above Ringdove Bay, 9 Nov 1950, E.G. Turbott. Tussock.

Melanchra dives Philpott, 1930: 1

HOLOTYPE ♂, dry

Dunedin, Flagstaff Hill, 23 Oct 1914, C.E. Clarke.

Morrisonia longstaffii Howes, 1911: 128

HOLOTYPE 3, dry

Dunedin, Tomahawk, 22 Mar 1907, W.G. Howes

Note: Not listed by Powell (1941) and thought lost. Lectotype ♂ designated by Dugdale

(1988: 200) in BMNH.

Morrisonia pascoei Howes, 1912: 205

HOLOTYPE ♀, dry

Orepuki, 1 Sep 1910, W.G. Howes.

Note: Not listed by Powell (1941). Dugdale (1988: 207 and pers. comm.) designated a lectotype of believing Howes' types a syntype series. All are labelled "co-type" except the of from Orepuki where the "co" appears to have been deliberately crossed out. This accords with Howes' practice with other species where he designated a type and cotypes, not an undifferentiated syntype series. Whatever the status of the putative holotype and lectotype, the entire type series is in the AMNZ.

Morrisonia praesignis Howes, 1911: 128

HOLOTYPE 9, dry

Orepuki, 1 Oct 1910, W.G. Howes.

Note: Recorded as a \circlearrowleft in Howes' original description. Not listed by Powell (1941).

Morrisonia sequens Howes, 1912: 204

HOLOTYPE ♀, dry

North Island, Whakarewarewa, 15 Feb 1910, G.B. Longstaff.

Note: Not seen by Dugdale (1988).

Nepticula lucida Philpott, 1919: 225

HOLOTYPE ♂, dry

Dunedin, Waitati, 3 Nov 1917, C.E. Clarke. Beaten from foliage of Nothofagus.

Nyctemera annulata antipodea Salmon & Bradley, 1956: 64

Antipodes Is, Ringdove Bay, 10 Nov 1950, E.G. Turbott. Reared from larva collected on *Senecio antipodus*.

Orocrambus clarkei Philpott, 1930: 3

HOLOTYPE ♂, dry

Franz Josef, Mt Moltke, 4000-5000', 20 Jan 1925, C.E. Clarke.

Orocrambus lindsayi Gaskin, 1975: 324

HOLOTYPE ♀, dry

Mt Ida, 19 Feb 1922, C.E. Clarke.

Note: Dissected genitalia in microvial on separate pin.

Orocrambus ordishi Gaskin, 1975: 327

HOLOTYPE ♂, dry

Hinds, 13 Mar 1911, C.E. Clarke.

Note: Dissected genitalia in microvial on separate pin (ALZ).

Orthenches disparilis Philpott, 1931: 34

HOLOTYPE ♂, dry

Auckland, Kauri Gully, 27 Jan 1921, C.E. Clarke.

Orthenches septentrionalis Philpott, 1930: 14

HOLOTYPE ♂, dry

Auckland, Kauri Gully, 10 Jan 1919, C.E. Clarke.

Porina unimaculata Salmon, 1948c: 309

HOLOTYPE &, dry & 2 slides

Three Kings Is, Great I, 24 Apr 1946, E.G. Turbott. At light.

Note: Abdominal tergites, sternites and dissected genitalia mounted on 2 slides.

Pseudocoremia maculosa Howes, 1914: 96

HOLOTYPE &, dry

Whakatipu district, Queenstown, 20 Nov 1910, M.O. Pasco.

Pyrgotis humilis Philpott, 1930: 4

HOLOTYPE ♂, dry

Otago, Mt Maungatua, 2 Dec 1923, C.E. Clarke.

Note: Dissected abdomen in microvial on pin.

Pyrgotis modesta Philpott, 1930: 4

HOLOTYPE ♂, dry

Westland, Waiho Gorge, 16 Jan 1925, C.E. Clarke.

Note: Dissected genitalia in microvial on pin.

Sabatinca abyssina Clarke, 1934: 15

Westland, NE side of Franz Josef Glacier, 23 Jan 1925, C.E. Clarke. On rough, ice-worn rocks.

Sabatinca lucilia Clarke, 1920: 35

HOLOTYPE, dry

Auckland, Kauri Gully, 10 Jan 1919, C.E. Clarke. Sunny moss covered clay bank.

Scoparia contexta Philpott, 1931: 28

HOLOTYPE o, dry

Franz Josef Glacier, Mt Moltke, 5000', 20 Jan 1925, C.E. Clarke.

Scoparia famularis Philpott, 1930: 3

HOLOTYPE ♀, dry

S Arm of L Te Anau, Kepler Mts, 3500', 3 Jan 1925, C.E. Clarke.

Scoparia illota Philpott, 1919: 224

HOLOTYPE ♂, dry

Wairaurahiri R, 12 Dec 1917.

Note: Recorded missing by Dugdale (1988: 161).

Scoparia sylvestris Clarke, 1926: 418

HOLOTYPE ♀, dry

Westland, Otira R, 30 Jan 1922, C.E. Clarke.

Scoparia tuicana Clarke, 1926: 418

HOLOTYPE &, dry

Waitati, 7 Dec 1918, C.E. Clarke.

Scythris nigra Philpott, 1931: 31

HOLOTYPE ♂, dry

Mt Maungatua, 21 Dec 1924, C.E. Clarke.

Selidosema insignita Philpott, 1930: 2

HOLOTYPE ♂, dry

Kaeo, 16 Jan 1921, C.E. Clarke.

Note: Wings in paper triangle attached to pin.

Selidosema pergrata Philpott, 1930: 2

HOLOTYPE ♂, dry

Otago, Sandymount, 26 Feb 1922, C.E. Clarke.

Simaethis chatuidea Clarke, 1926: 421

HOLOTYPE ♂, dry

Dunedin, Andersons Bay, 19 Nov 1921, C.E. Clarke.

Note: Published date (Nov 1923) and label disagree.

Simaethis fasciata Philpott, 1930: 13

HOLOTYPE ♂, dry

Arthurs Pass, 24 Jan 1923, C.E. Clarke.

Simaethis inspoliata Philpott, 1930: 12

HOLOTYPE ♂, dry

L Manapouri, Hunter Mts, Flat Mt, 4000', 28 Dec 1928, C.E. Clarke.

Simaethis tristis Philpott, 1930: 12

HOLOTYPE odry

Tongariro National Park, slopes of Mt Ruapehu, 16 Jan 1930, A. Philpott.

Simaethis urbana Clarke, 1926: 420

HOLOTYPE ♂, dry

Arthurs Pass, 4000', 21 Jan 1922, C.E. Clarke. On open mountainside.

Stathmopoda albimaculata Philpott, 1931: 33

HOLOTYPE ♀, dry

Taieri, Woodside, 16 Dec 1923, C.E. Clarke.

Stathmopoda seminuda Philpott, 1917: 244

HOLOTYPE 3, dry

Dunedin, Broad Bay, 28 Nov 1915, C.E. Clarke.

Talaeporia triangularis Philpott, 1930: 16

HOLOTYPE ♂, dry

Hump Mt, 2 Jan 1922, C.E. Clarke.

Tanaoctena dubia Philpott, 1931: 34

HOLOTYPE ♂, dry

Auckland, 8 Jan 1919, C.E. Clarke.

Tatasoma monoviridisata Clarke, 1920: 35

HOLOTYPE ♂, dry

Waitati, 12 Nov 1916, C.E. Clarke. Beaten from Coriaria.

Note: Published dates (1918, 1919) and label (1916) disagree.

Tauroscopa nebulosa Philpott, 1930: 3

HOLOTYPE ♂, dry

L Wanaka, Minaret Pk, 30 Dec 1923, C.E. Clarke.

Tinea aerata Philpott, 1930: 15

HOLOTYPE ♀, dry

Tongariro National Park, 16 Jan 1930, A. Philpott.

Tinea aetherea Clarke, 1926: 421

HOLOTYPE ♂, dry

Arthurs Pass, 3500', 26 Jan 1923, C.E. Clarke.

Tinea conspecta Philpott, 1931: 35

HOLOTYPE ♂, dry

Auckland Domain, 21 Apr 1929, A. Philpott.

Note: Published date (November) and label (April) disagree.

Tinea furcillata Philpott, 1930: 15

HOLOTYPE &, dry

Dunedin, Andersons Bay, 8 Nov 1922, C.E. Clarke.

Tortrix clarkei Philpott, 1930: 5

HOLOTYPE ♂, dry

Waimarino, 24 Jan 1919, C.E. Clarke.

Note: Dissected abdomen in microvial on pin.

Tortrix cuneata Clarke, 1926: 419

HOLOTYPE ♂, dry

L Manapouri, Hope Arm, 7 Jan 1923, C.E. Clarke. In glade of beech forest.

Note: Dissected abdomen in microvial on pin.

Tortrix encausta Philpott, 1930: 6

HOLOTYPE ♂, dry

Kaeo, 16 Jan 1921, C.E. Clarke.

Note: Dissected abdomen in microvial as indicated by label not located.

Tortrix indomita Philpott, 1930: 6

HOLOTYPE ♂, dry

Dunedin, Woodhaugh, 13 Dec 1918, C.E. Clarke.

Note: Dissected abdomen in microvial on separate pin.

Tortrix inusitata Philpott, 1919: 225

HOLOTYPE ♂, dry

Dunedin, Waitati, 14 Oct 1917, C.E. Clarke.

Note: Dissected abdomen in microvial on pin.

Trachypepla festiva Philpott, 1930: 10

HOLOTYPE o, dry

Whangarei Falls, 5 Jan 1927, C.E. Clarke.

Trachypepla metallifera Philpott, 1928: 368

HOLOTYPE ♂, dry

Waimarino, 24 Jan 1919, C.E. Clarke.

Trachypepla minuta Philpott, 1931: 33

HOLOTYPE ♂, dry

Auckland Domain, 29 Dec 1929, A. Philpott.

Trachypepla nimbosa Philpott, 1930: 10

HOLOTYPE &, dry

Auckland, Kauri Gully, 13 Jan 1919, C.E. Clarke.

Xanthorhoe citroena Clarke, 1934: 11

HOLOTYPE ♂, dry

Westland, Waiho Gorge, 13 Jan 1925, C.E. Clarke. At edge of Franz Josef Glacier.

Xanthorhoe glaciata Hudson, 1925: 220

HOLOTYPE &, dry

S Westland, Franz Josef Glacier, Mt Moltke, 5600', 20 Jan 1925, C.E. Clarke.

Xanthorhoe ida Clarke, 1926: 417

HOLOTYPE ♂, dry

Central Otago, Mt Ida, 19 Feb 1922, W.G. Howes.

Note: Published date (1923) disagrees with label (1922).

Zelleria maculata Philpott, 1930: 13

HOLOTYPE ♂, dry

Otago, Mt Maungatua, 1 Jan 1925, C.E. Clarke.

Order ODONATA

Xanthocnemis sinclairi Rowe, 1987: 95

HOLOTYPE o, wet

Whitcombe Pass, 11 Feb 1971, M. Woodward. Tarn.

Note: Allotype in same tube.

Xanthocnemis tuanuii Rowe, 1981: 205

HOLOTYPE of, wet

Chatham I, Peat Stm E of Tuku Base, 22 Jan 1980, R.J. Rowe. In copula, brown water,

forest stream.

Note: Allotype in same tube.

Order ORTHOPTERA

Gymnoplectron giganteum Richards, 1962: 205

HOLOTYPE of, wet

Poor Knights Is, 22-29 Nov 1940, E.G. Turbott.

Note: Dissected genitalia in enclosed vial.

Hemideina gigantea Colenso, 1882: 278

HOLOTYPE ♀, dry

Bay of Islands, behind Paihia, 1838, Colenso. In small low wood.

Note: No original Colenso labels survive. There is some doubt about this specimen's

status but circumstantial evidence points to it being Colenso's type.

Pachyrhamma fusca Richards, 1959a: 29

HOLOTYPE of, wet

Thames, 1958, A.M. Richards. Gold-mining tunnels.

Pachyrhamma longicauda Richards, 1959b: 329

HOLOTYPE ♂, wet

Taumarunui

Note: Dissected subgenital plate in enclosed vial.

Pachyrhamma uncata Richards, 1959a: 32

HOLOTYPE o, wet

Thames, 26 Apr 1958, A.M. Richards. Ex goldmine.

Note: Dissected subgenital plate in enclosed vial.

Pachyrhamma waitomoensis Richards, 1958: 702

HOLOTYPE &, wet

Waitomo, Aranui Cave, 8 Mar 1955, A.M. Richards.

Note: Dissected subgenital plate in enclosed vial.

Pallidoplectron turneri Richards, 1958: 703

HOLOTYPE ♂, wet

Waitomo, Tunnel Glow Worm Cave, 22 Jan 1956, A.M. Richards.

Paraneonetus multispinus Salmon, 1948b: 306

SYNTYPES (1d 19), dry

Three Kings Is, Great I, 29 Apr 1946, E.G. Turbott.

Turbottoplectron unicolor Salmon, 1948b: 303

HOLOTYPE ♂, dry

Three Kings Is, Great I, 29 Apr 1946, E.G. Turbott.

Order PHASMATODEA

Acanthoxyla senta Salmon, 1948b: 301

SYNTYPES (13 19), dry

Three Kings Is, Great I, Quadrat I, 6 May 1948, E.G. Turbott. Taken together on Litsea.

Order PLECOPTERA

Notonemoura cowleyi Winterbourn, 1965: 278

HOLOTYPE o, wet

Westland, Kumara, 24 Jan 1964, D.R. Cowley.

Spaniocercoides fimbria Winterbourn, 1965: 280

HOLOTYPE of, wet

Wellington, Khandallah Domain, 29 Dec 1963, M.J. Winterbourn.

Zelandobius pallidus Winterbourn, 1965: 275

HOLOTYPE ♂, wet

Little Barrier I, Awaroa Stm, 30 Aug 1963, M.J. Winterbourn.

Zelandoperla maculata (Hare, 1910: 29) Winterbourn, 1965: 260

NEOTYPE &, wet

Swanson, 22 Sep 1963, M.J. Winterbourn.

Order TRICHOPTERA

Alloecentrella magnicornis Wise, 1958: 53

HOLOTYPE ♂, dry & wet

Waitakere, 28 Oct 1934, C.E. Clarke.

Note: Dissected genitalia in alcohol.

Costachorema notoptera Wise, 1972: 253

HOLOTYPE o, wet & slide

Auckland Is, SE Enderby I, 17 Jan 1963, K.A.J. Wise. Ex pond stream, 10.30pm - 12 midnight.

Note: Right wings mounted on slide.

Diplectrona bulla Wise, 1958: 56

HOLOTYPE ♂, dry & wet

Waimarino, 27 Jan 1919, C.E. Clarke.

Note: Dissected genitalia in alcohol.

Ecnomina zealandica Wise, 1958: 57

HOLOTYPE ♀, dry & wet

Kauri Gully, 13 Jan 1919, C.E. Clarke.

Note: Dissected genitalia in alcohol.

Edpercivalia harrisoni Wise, 1982: 150

HOLOTYPE &, dry & wet

Fiordland National Park, Murchison Mts, Plateau Ck, 990 m, 2 Dec 1980, R.M. Emberson

& C.A. Muir. On rock at night.

Note: Dissected genitalia in alcohol.

Hydrobiosis falcis Wise, 1958: 58

HOLOTYPE &, dry & wet

Whakapapanui Stm, 3500', 19 Oct 1949, E.G. Turbott. At light.

Note: Dissected genitalia in alcohol.

Neobiosella irrorata Wise, 1958: 58

HOLOTYPE ♀, dry

Whangarei, 7 Jan 1927, C.E. Clarke.

Oeconesus lobatus Wise, 1958: 51

HOLOTYPE ♂, dry & wet

Raurimu, 16 Jan 1919, C.E. Clarke.

Note: Dissected genitalia in alcohol.

Olinga fumosa Wise, 1958: 52

HOLOTYPE ♂, dry & wet

Waitati, 28 Nov 1917, C.E. Clarke.

Note: Dissected genitalia in alcohol.

Polyplectropus penicillus Wise, 1958: 57

HOLOTYPE ♂, dry & wet

Dunedin, 22 Nov 1916, C.E. Clarke.

Note: Dissected genitalia in alcohol.

Pseudoeconesus bistirpis Wise, 1958: 52

HOLOTYPE ♂, dry & wet

Tongariro, 16 Jan 1930, A. Philpott.

Note: Dissected genitalia in alcohol.

Pseudoeconesus tristirpis Wise, 1958: 52

HOLOTYPE &, dry & wet

Tongariro, 16 Jan 1930, A. Philpott.

Note: Dissected genitalia in alcohol.

Psilochorema embersoni Wise, 1982: 149

HOLOTYPE ♂, dry & wet

Fiordland National Park, Murchison Mts, E McKenzie Burn, 1110 m, 8 Dec 1980, R.M.

Emberson & C.A. Muir. Celmisia leaf.

Note: Dissected genitalia in alcohol.

Pycnocentrodes aeris Wise, 1958: 50

HOLOTYPE &, dry & wet

Kinloch, 15 Jan 1926, C.E. Clarke.

Note: Dissected genitalia in alcohol.

Pycnocentrodes unicolor Wise, 1958: 50

HOLOTYPE ♂, dry & wet

Hump Mt, 2 Jan 1922, C.E. Clarke.

Note: Dissected genitalia in alcohol.

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